990-2

Coal - Surface Fatalities Second Half - 1990

U.S. Department of Labor
Mine Safety and Health Administration

ABSTRACTS WITH ILLUSTRATIONS

ANALYSIS AND SUGGESTED USES

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Coal - Surface Fatalities
Second Half - 1990

U.S. Department of Labor
Lynn Martin
Secretary

Mine Safety and Health Administration
William J. Tattersall
Assistant Secretary

INTRODUCTION

The 1990 Fatal Illustration Program is divided into four categories or subject areas. These categories are underground coal mining; surface coal mining; underground metal/nonmetal mining; and surface metal/nonmetal mining. Fatalities in each category are grouped by accident type.

The materials in this unit include illustrated abstracts (summaries) of all chargeable surface coal mining fatalities for the second six months of 1990 accompanied by 35mm slides.

A statistical analysis is included for fatalities that occurred during July through December 1990. The analysis examines the following areas: the victim's experience, the accident classification, the victim's occupation, and the size of the mine where the fatality occurred. Tables are included in this package. They are divided into first half and second half data for 1990. The tables tabulate age and experience of the victim, accident classification and occupation of the victim, and mine size and location of the accident. A slide index is also included which helps locate fatalities for a particular occupation, accident classification, location, and mine size.

DISCLAIMER

The abstracts included in this program are intended to be used for instructional purposes. Efforts are made to base this data on MSHA's final accident investigation reports. However, preliminary investigation information may have been used for these abstracts to meet the deadline for this publication.

FATALITIES - SURFACE COAL MINES - SECOND HALF 1990

STATISTICAL ANALYSIS

Eight fatal accidents occurred at surface coal mines during July through December 1990.

Victim's Experience

- Seven of the eight fatalities for the second half of 1990 involved workers who had 10 years or less experience at the mine and at their particular job.

Accident Classification

- Three of the eight fatalities for the second half of 1990 involved powered haulage accidents. (One of these powered haulage accidents involved a female truck driver.)

Victim's Occupation

- Truck drivers were involved in 50 percent of the fatalities for the second half of 1990.

Mine Size

- Six of the fatalities occurred at large operations (20 or more employees) and two of the fatalities occurred at small operations (less than 20 employees).

Contractor Fatalities

- One of the eight fatalities occurred to a contractor.

FATALITIES BY VICTIM'S AGE
SURFACE COAL

First Half 1990

Age (Years)	Number of Fatalities
20-25	1
31-35	4
46-50	1
51-55	2
56-60	2
61-65	1

Second Half 1990

Age (Years)	Number of Fatalities
26-30	1
31-35	1
46-50	2
51-55	3
56-60	1

FATALITIES BY VICTIM'S EXPERIENCE
SURFACE COAL

First Half 1990

Experience (Years)	Mining Experience	Job Experience	Experience This Mine
0 - 1 day		1	1
1 - 4 weeks	1	1	1
1 - 6 mos.		1	
1 - 2 yrs.		2	3
3 - 4 yrs.		1	2
5 - 6 yrs.		1	
7 - 8 yrs.		1	1
9 - 10 yrs.		1	
13 - 14 yrs.	3	2	3
15 - 20 yrs.	1		
21 - 25 yrs.	1		
30 +	2		
Unknown	2		
N/A	1		

Second Half 1990

Experience (Years)	Mining Experience	Job Experience	Experience This Mine
1 - 6 mos.		1	1
1 - 2 yrs.		2	1
3 - 4 yrs.	1		1
5 - 6 yrs.	1	1	1
7 - 8 yrs.	1	2	2
9 - 10 yrs.	1	1	1
19 - 20 yrs.	1	1	1
21 - 22 yrs.	1		
30 +	1		
Unknown	1		

FATALITIES BY ACCIDENT CLASSIFICATION
SURFACE COAL 1990

Classification	Fatalities (1st Half)	Fatalities (2nd Half)	Fatalities (Total)
Electrical	1		1
Explosives	1		1
Fall of Person	3	1	4
Falling Material	1	1	2
Ignition		1	1
Machinery	1	1	2
Powered Haulage	3	3	6
Other	1	1	2

FATALITIES BY VICTIM'S OCCUPATION
SURFACE COAL 1990

Occupation	Fatalities (1st Half)	Fatalities (2nd Half)	Fatalities (Total)
Equipment Operator		1	1
Front-End Loader Operator	2		2
Laborer	1	1	2
Heavy Equipment Operator	1	1	2
Mechanic	1		1
Pumper		1	1
Truck Driver	4	4	8
Supervisors	1		1
Welder/Repairman	1		1

FATALITIES BY MINE SIZE
SURFACE COAL 1990

Mine Size	Fatalities (1st Half)	Fatalities (2nd Half)	Fatalities (Total)
Small *	2	2	4
Large **	9	6	15

* Less than 20 employees
** 20 or more employees

SLIDE INDEX

FATALITIES BY OCCUPATION
SURFACE COAL - SECOND HALF 1990

You will find fatalities that happened to:
EQUIPMENT OPERATORS on slides 14 and 18
LABORERS on slide 15
PUMPERS on slide 19
TRUCK DRIVERS on slides 12, 13, 16, and 17

FATALITIES BY ACCIDENT CLASSIFICATION
SURFACE COAL - SECOND HALF 1990

You will find:
FALL OF PERSON fatalities on slides 15 and 16
FALLING MATERIAL fatalities on slide 17
MACHINERY fatalities on slide 19
IGNITION fatalities on slide 18
POWERED HAULAGE fatalities on slides 12, 13, and 14

FATALITIES BY MINE SIZE
SURFACE COAL - SECOND HALF 1990

You will find fatalities that happened at:
SMALL MINES * on slides 15 and 18
LARGE MINES ** on slides12, 13, 14, 16, 17, and 19

* Less than 20 employees
** 20 or more employees

ABSTRACT OF INVESTIGATION

Date: August 17, 1990 (Died August 18, 1990)
Slide Number: 12 (Fatal Case Number: 44)
Accident Classification: Powered Haulage
Type of Mine: Lignite - Surface
Location: Texas

Age of Victim: 52
Total Mining Experience: 6 years, 11 months
Total Experience at this Mine: 6 years, 2 months
Total Experience at this Job: 6 years, 2 months
Number Employed at Mine: 193
Number Working at Time of Accident: 90
Time of Accident: 2:35 p.m.

A truck driver was returning to the pit for her last load of the shift. She travelled through the intersection and into the right lane of the haul road. The normal traffic pattern was for trucks entering the haul road to maintain left lane traffic for about a quarter of a mile to the lane change area. The victim collided with a loaded truck approaching in the opposite direction. She was thrown across the truck cab where her head struck the windshield support causing fatal injuries. She died the next day.

Means of Prevention

1. Always follow established traffic rules.
2. Seat belts shall be worn when operating haulage trucks.
3. Lane change areas shall be adequately and conspicuously marked.

ABSTRACT OF INVESTIGATION

Date: October 18, 1990

Slide Number:13 (Fatal Case Number: 57)

Accident Classification: Powered Haulage

Type of Mine: Coal - Open Pit

Location: Kentucky

Age of Victim: 51
Total Mining Experience: 22 years
Total Experience at this Mine: 3 months
Total Experience at this Job: 3 months
Number Employed at Mine: 47
Number Working at Time of Accident: 15
Time of Accident: 8:40 p.m.

A truck driver was dumping rock at a fill area when he backed his truck over the embankment. The truck came to rest in an upright position 515 feet below the crest of fill area.

Means of Prevention

1. Elevated roadways should be provided with an adequate berm.
2. Adequate berms, bumper blocks, or other safety means shall be provided at the dump area of the fill to prevent overtravel and overturning at dumping locations.
3. Seat belts shall be worn when operating haulage trucks.

ABSTRACT OF INVESTIGATION

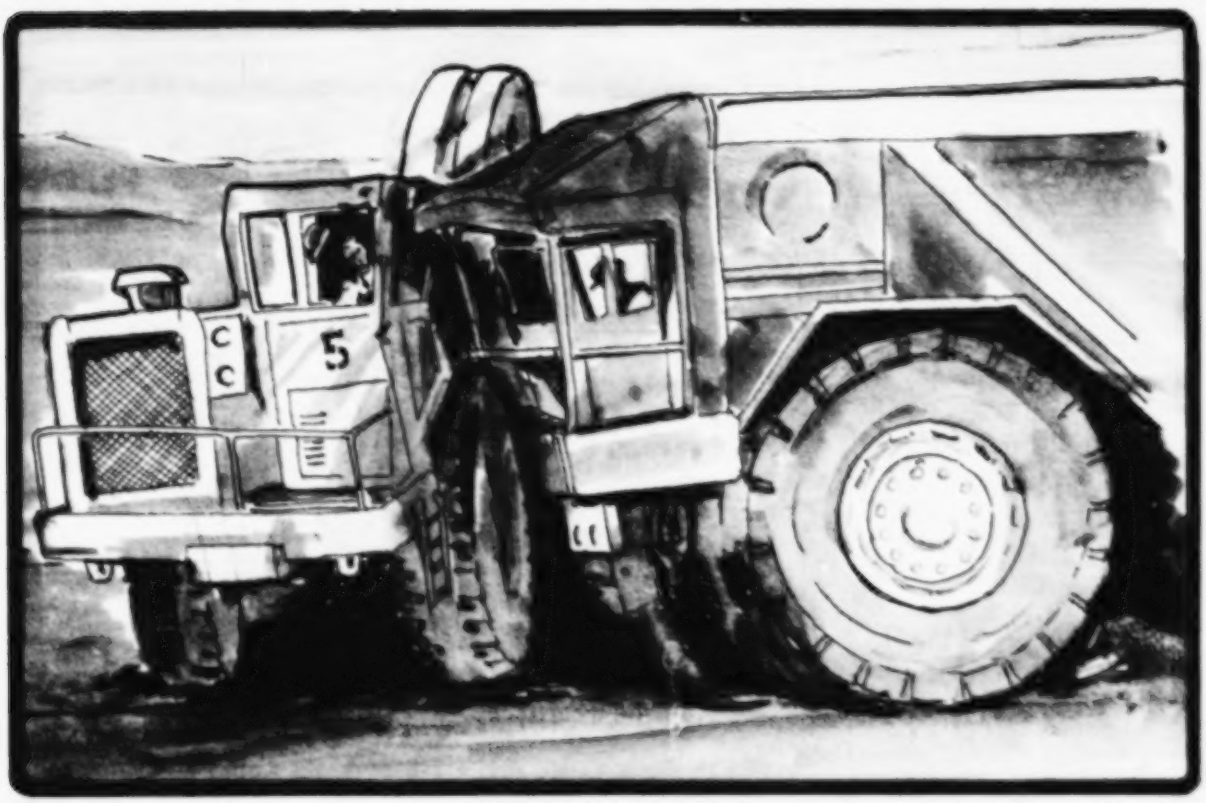
Date: December 17, 1990

Slide Number: 14 (Fatal Case Number: 64)
Accident Classification: Powered Haulage
Type of Mine: Lignite - Surface
Location: North Dakota

Age of Victim: 47
Total Mining Experience: 10 years
Total Experience at this Mine: 10 years
Total Experience at this Job: 10 years
Number Employed at Mine: 242
Number Working at Time of Accident: 68
Time of Accident: 11:10 p.m.

A scraper collided with a 160 ton haul truck at an intersection on a main haul road. The collision resulted in fatal injuries to a heavy equipment operator and minor injuries to a coal truck driver.

Means of Prevention
Reduce speed limit or erect stop signs at intersections.



ABSTRACT OF INVESTIGATION

Date: August 8, 1990

Slide Number: 15 (Fatal Case Number: 42)

Accident Classification: Fall of Person

Type of Mine: Coal - Surface

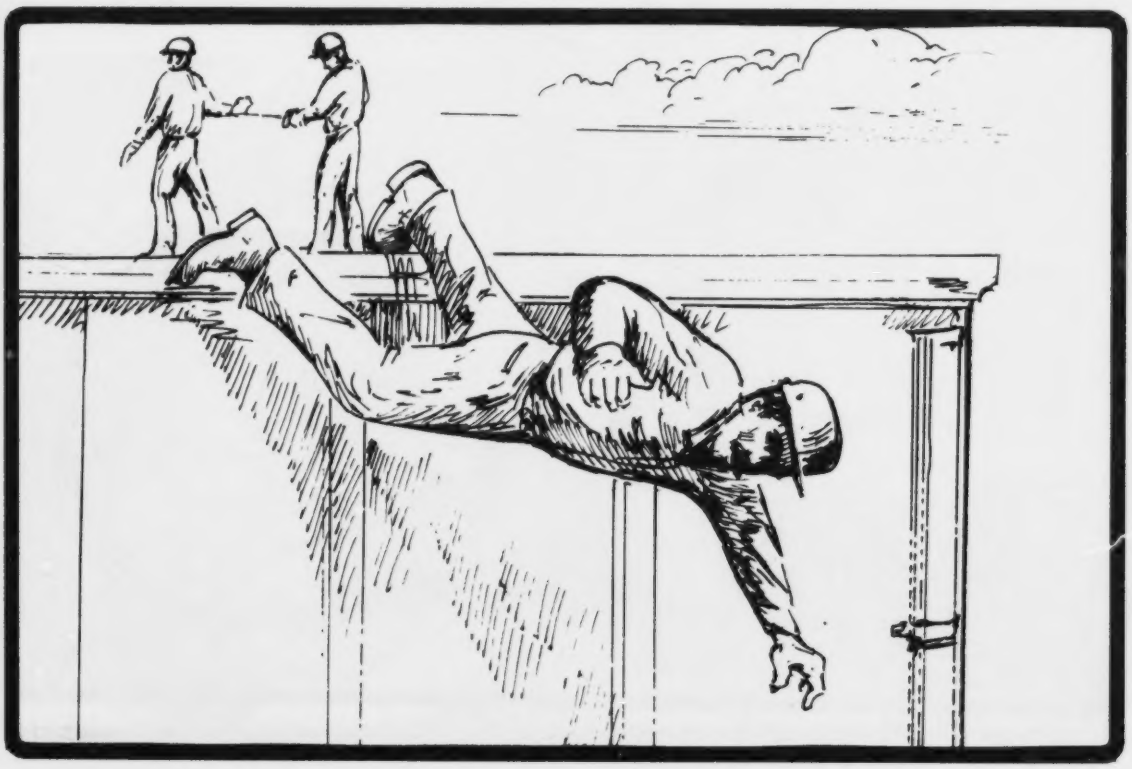
Location: Indiana

Age of Victim: 26
Total Mining Experience: 4 1/2 years (Contractor)
Total Experience at this Mine: 4 1/2 years
Total Experience at this Job: 4 1/2 years
Number Employed at Mine: 5 (Contractor)
Number Working at Time of Accident: 3 (Contractor)
Time of Accident: 12:45 p.m.

A general laborer and two other employees were working on top of a flat roof of a repair garage. They were attempting to stretch and snap a chalk line near the edge of the 29-foot high garage roof. As the chalk line was being stretched, the general laborer accidentally stepped or fell off the corner of the roof resulting in fatal head injuries.

Means of Prevention

1. Safety belts and lines shall be worn where there is a danger of falling.
2. Always place yourself in a safe location and be constantly aware of your position when working where there is a danger of falling.



ABSTRACT OF INVESTIGATION

Date: September 10, 1990

Slide Number: 16 (Fatal Case Number: 48)
Accident Classification: Fall of Person
Type of Mine: Coal - Surface
Location: Ohio

Age of Victim: 53
Total Mining Experience: 35 years
Total Experience at this Mine: 20 years
Total Experience at this Job: 20 years
Number Employed at Mine: 59
Number Working at Time of Accident: 24
Time of Accident: 7:30 a.m.

A truck driver was on top of a loaded truck leveling the coal in the trailer. The truck driver was found with fatal injuries lying face down on the ground beside the trailer.

Means of Prevention

1. Safety belts and lines shall be worn where there is a danger of falling.
2. A leveling area should be provided.

ABSTRACT OF INVESTIGATION

Date: December 27, 1990

Slide Number: 17 (Fatal Case Number: 66)
Accident Classification: Falling Material
Type of Mine: Coal - Mill/Preparation Plant
Location: Pennsylvania

Age of Victim: 61
Total Mining Experience: Unknown
Total Experience at this Mine: 1 year
Total Experience at this Job: 1 year
Number Employed at Mine: 21
Number Working at Time of Accident: 3
Time of Accident: 9:15 p.m.

After dumping a load of coal into a coal feed hopper, a truck driver apparently climbed on top of the coal in the hopper to dislodge lumps of frozen material. His body was discovered by another plant employee. There was approximately 18 tons of material in the hopper at the time the victim was found.

Means of Prevention

No person shall walk or stand immediately above a reclaiming area at or near a surge or storage pile where the reclaiming operation may expose the worker to a hazard.

ABSTRACT OF INVESTIGATION

Date: August 7, 1990 (Died August 23, 1990)
Slide Number: 18 (Fatal Case Number: 45)
Accident Classification: Ignition
Type of Mine: Coal - Surface/Loading Facility
Location: Kentucky

Age of Victim: 33
Total Mining Experience: 2 years, 11 months
Total Experience at this Mine: 2 years, 11 months
Total Experience at this Job: 1 year, 8 months
Number Employed at Mine: 18
Number Working at Time of Accident: 12
Time of Accident: 7:50 p.m.

An equipment operator was moving a large metal hopper cover with a dozer. Unknown to the equipment operator, a compressed gas cylinder, covered with brush, had been stored near the hopper cover. As the equipment operator moved the hopper cover, the compressed gas cylinder shifted and struck the side of the hopper cover causing the fill valve on the cylinder to rupture and release its gas. The dozer operator backed the dozer approximately twelve feet away from the gas cylinder and dismounted the loader to investigate the hissing sound. The gas dispersed into the left rear area of the dozer, reached a smoldering fire and ignited. The fire flashed back to the tank, causing second and third degree burns to the equipment operator which resulted in his death sixteen days later.

Means of Prevention
Compressed gas cylinders shall be stored only in proper storage facilities.

ABSTRACT OF INVESTIGATION

Date: October 1, 1990

Slide Number: 19 (Fatal Case Number: 54)

Accident Classification: Machinery

Type of Mine: Coal - Surface

Location: Indiana

Age of Victim: 47
Total Mining Experience: 19 years, 11 months
Total Experience at this Mine: 7 years
Total Experience at this Job: 7 years
Number Employed at Mine: 218
Number Working at Time of Accident: 52
Time of Accident: 7:30 p.m.

A pumper was operating a tractor (dozer) in two or three feet of water attempting to reposition a large floating pump. He trammed the tractor over the edge of an eight to ten feet deep sump hole that had been dug to collect water. The sump was about twenty feet wide and 40 feet long and was obscured beneath the two to three feet of water in the end of the pit. The tractor slid sideways into the sump and was completely submerged. The pumper drowned as a result of the accident.

Means of Prevention

1. Wear life jackets or belts where there is a danger from falling into water.
2. Do not operate equipment in water where the bottom is obscured and the terrain is not known.